

REMARKS

Status Summary

Claims 1-53 are pending in the present application. No claims have been added and no claims have been canceled. Therefore, upon entry of this amendment, claims 1-53 will remain pending. No new matter has been introduced by the present amendment. Reconsideration of the application as amended and based on the arguments presented below is respectfully requested.

Claim Objections

Claim 22 is objected to as containing informalities. Namely, the word “Indian” was unintentionally used in place of “Endian” in two instances. In response, the objected claim has been amended per the suggestion of the Examiner. Thus, applicant respectfully submits that the objection to claim 22 should be withdrawn.

Claim Rejections - 35 U.S.C. § 102

Claims 1-53 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,772,320 to Raj et al. (hereinafter “Raj”). The rejection is respectfully traversed.

Independent claim 1 recites a method for exchanging data between a first component and a second component having a respective first native data structure format and a second native data structure format. Notably, claim 1 recites a method of exchanging native data structure format information between the first and second components (e.g., a primary server and a backup server). In one embodiment, the

first component may generate data in the first native data structure format, e.g., NDSF data **115**, which is subsequently transmitted to the second component. The second component translates the received NDSF data **115** into data that is in the second native data structure format, e.g., NDSF data **125**, by using the exchanged native data structure format information. (See applicant's specification, paragraphs [0018] and [0019] in US 2005/0216896).

In one embodiment, the native data structure format information exchanged between the first component (e.g., component **110**) and second component (e.g., component **120**) may include a translation map **150**. Paragraph [0019] explains that in order to facilitate the translation of data exchanged between the first component and the second component, translation map **150** is transmitted from the first component to the second component with or after the transmission of NDSF data **115**. The specification also mentions various methods in which translation map **150** may be sent (e.g., repeatedly, prior to sending NDSF data, immediately after establishing a communications link, etc.). In addition, the second component may also provide a translation map **160** to the first component in the same manner translation map **150** is exchanged. (See paragraph [0019]).

As mentioned above, the second component utilizes translation map **150** to translate NDSF data **115** into NDSF data **125**. A translation map, or any other form of native data structure format information, is used when the native data structure formats of the first and second components differ. For example, suppose the second component normally employs five variables during data processing, but receives six

variables in the received NDSF data **115**. (See applicant's Figure 1). The second component may then utilize translation map **150** (and possibly its own translation map **160**) to determine how to process the extra variable present in NDSF data **115**. (See page 2, paragraph [0020]). Depending on translation map **150** (and possibly translation map **160**), data variables in NDSF data **115** may be rearranged, segmented, discarded, etc., during the translation process so that the data may be translated into a compatible form used by the second component. Moreover, translation map **150** also informs the second component how to handle an unfamiliar or disproportionate number of bits contained within each variable as well. (See Applicant's specification, paragraphs [0020] and [0021]). Independent claims 29, 38, 45, and 48, like claim 1, each recite the exchange of data structure format information between first and second components that have different native data structure formats. Thus, claims 1, 29, 38, 45 and 48 recite exchanging native data structure format information, an example of which is translation map **160**, between components that have different native data structure formats..

There is absolutely no teaching or suggestion in Raj of exchanging data structure formats between first and second components between components that use different native data structure formats as recited in independent claims 1, 29, 38, 45, and 48. In contrast, Raj teaches a method for converting data for computer systems having different data storage architectures. The method is primarily used for converting data stored in little endian and big endian formats and relies on creating a data structure that is used to convert the data utilizing embedded macros that are not

executed at run time. (See Raj, Abstract). Applicant respectfully submits that Raj does not teach or mention the exchange of native data structure format information between the first and second components. On page 3 of the Official Action dated 6/7/2007, the Examiner alleges that column 1, lines 50-60 of Raj teaches the exchanging of native data structure format information. Specifically, column 1, lines 50-60 of Raj recites:

However, when a big endian machine and a little endian machine attempt to communicate through memory reads and writes to each other, the data must be re-formatted to be accessible by the other machine. In order to accomplish this programmer's have developed code that swaps bits and bytes of data within words being accessed. However, this development of code by different programmers is time-consuming and prone to error. Further, this code is often specific to each specific application generated. Therefore, one of the purposes of direct memory access for communications is defeated by the lengthy time requirements for this conversion process. (Emphasis added).

The Examiner's attention is directed to the fact that this cited section addresses the transfer of the actual data to be converted and the communication between a big endian machine and a little endian machine. The section further describes that the reformatting of the data is accomplished by swapping bits and bytes of data within the words being accessed. The "swapping" of bits is typical for reformatting big endian and little endian data (e.g., reformatting may be accomplished by simply swapping the order of data since little endian architecture requires the least significant byte to be placed in a lower memory address, whereas the most significant byte is placed in a lower memory address in a big endian architecture). (See Raj, column 1, lines 35-42). Namely, this section cited by the Examiner, or any other section in Raj for that matter,

fails to teach the exchange of any native data structure format information. Rather, this section only teaches the exchange of the data to be converted. Applicant submits that the exchange of native data structure format information is not needed for the subject matter presented in Raj because the byte positions are simply rearranged based on whether big endian or little endian byte order is desired (See Raj, column 4, line 48 to column 5, line 14; Figure 3). Also, Raj does not address the situation where data sent from a first component differs from a second component's native data structure format, especially where the number of variables in the data, and even the byte sizes within the variables, are completely different. For instance, Raj does not teach or mention that variables within data to be translated may be added or deleted. In Raj, the simple swapping of variables would not suffice in the scenario where the actual number of variables of the data received does not match the number of variables typically handled by the component. This is one reason why the exchange of native data structure format information between the first and second components is facilitated in the claimed subject matter. Because Raj does not teach the exchange of native data structure format information of any type, applicant respectfully submits that claim 1 is not anticipated by Raj and therefore, the rejection of claim 1 under 35 U.S.C. § 102 should be withdrawn. Furthermore, since independent claims 29, 38, 45, and 48 include a similar element of exchanging native data structure format information, applicant submits that claims 29, 38, 45, and 48 are also not anticipated by Raj and the rejection of these claims under 35 U.S.C. § 102 should be withdrawn for at least the reasons presented above.

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Dependent claims 2-28, 30-37, 39-44, 46-47, and 49-53 depend from claims 1, 29, 38, 45, and 48 and recite additional features thereof. As such and for the same reasons set forth above, applicant submits that claims 22-28, 30-37, 39-44, 46-47, and 49-53 are not anticipated by Raj. Therefore, applicant submits that the rejection of these claims under 35 U.S.C. §102 should be withdrawn.

CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

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DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. **50-0426**.

Respectfully submitted,

JENKINS, WILSON, TAYLOR & HUNT, P.A.

Date: October 29, 2007 By: /Gregory A. Hunt/
Gregory Hunt
Registration No. 41,085

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Customer No: 25297